

aromatase inhibitors as a superior treatment to tamoxifen for women with breast cancer⁷ will undoubtedly save lives, but it was over 20 years ago that Miller et al first reported the enhanced expression of aromatase in breast tumours.⁸

If acted upon, the recommendations from the Academy of Medical Sciences might ensure that the NHS does not become solely a point of service delivery. A failure to underpin clinical research now will result in a cost to human life, maybe not today or tomorrow, but certainly over the next 10-20 years. We need to lobby for more council funding, work on academic career structures, and combat restrictive legislature that may impede clinical research along the way. A critical appraisal of research and development in the NHS perhaps seems the most fruitful avenue for immediate progress. The NHS must revitalise a research ethos in its organisation to ensure that it can deliver optimal care for patients for years to come.

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Practising just medicine in an unjust world

Initiatives to improve academic medicine in developing countries must come from within

A recent report by the Academy of Medical Sciences highlights the importance of clinical research, and the challenge of translating recent discoveries into clinical practice and public health interventions.¹ As the recommendations were made largely in the context of public health practice and academic medicine in the United Kingdom, how do they relate to the developing world, and are the challenges faced by academia in developing countries markedly different?

Although health systems and research in developing countries have been reviewed, little systematic evaluation has taken place of the problems that academic health professionals face.² Firstly, academic professionals in developing countries work in relative isolation from primary care settings, mostly in urban centres, and fewer still interact with public health policy makers.³ Given the average size of a medical class and the workload in busy public hospitals most have to contend with an enormous load of teaching and clinical care. Barring a few examples and specialised centres most academic salaries are insufficient to support a white collar lifestyle, and thus private practice is the most common means of augmenting earnings.⁴ These economic issues are by far the major factor underlying the academic brain drain in developing countries, but other factors such as security and lifestyle may also play a part.⁵

There is little continuing medical education and even rarer access to recent biomedical information. This information drought is filled largely by the pharmaceutical industry and multinationals with enormous resources for marketing their products, which raises questions about the base of the evidence used to prac-

tise in such settings.⁶ The research gap is even more yawning. The 10/90 gap alludes to the fact that less than 10% of the current global funding for research targets diseases that afflict over 90% of the population.² Not only are indigenous sources of funding for research therefore limited but most research models are based on outdated strategies of "colonial" or "parachute" research.⁷ When research does get undertaken few projects bear direct relevance to local public health needs and fewer still relate to health systems research.^{w1}

As the report indicates the importance of health system research and large effectiveness trials cannot be denied,¹ even in developing countries. Disappointingly, of the recently announced grand challenges in global health,⁸ none relate to the challenge of providing services with limited resources in difficult circumstances. Although many academic staff in developing countries rank locally conducted research as highly relevant and important to their practice,^{w2} few are involved in developing and testing public health interventions on a scale that has the potential of contributing to health systems. This lack of connection between academia and public health systems in developing countries creates an environment where inappropriate and ethically questionable research is commissioned,^{w3} and existing scientific knowledge and information fail to find its way into practice.⁹ For developing countries unethical research encompasses scientifically unsound research, duplicate studies, and research that does not relate to the health priorities of the population studied. The capacity to conceive, undertake, and evaluate appropriate research is a cornerstone of academic medicine and scholarship anywhere in the world.

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What is the way forward in developing countries? Strengthening centres of learning and creating local capacity for conducting and overseeing appropriate research are critical for the promotion of academic medicine in developing countries.¹⁰ Such measures and academic support for research must be coupled with easy electronic access and access to information. In a rapidly globalising world many health interventions and knowledge are truly global public goods and may provide solutions that are applicable to local needs. Recent initiatives such as providing electronic full text access to medical journals in developing countries are welcome and may be coupled with innovative projects such as the Ptolemy project, which links surgeons in Africa with information services at an academic centre in Canada.¹¹ Such partnerships between institutions in the developed world and centres of learning in developing countries are important, but most sustainable initiatives for improving academic medicine and clinical research in developing countries must come from within.

Investments towards strengthening academic medicine and scholarship in developing countries are a necessity rather than a luxury. A strong correlation has also been shown between investments in science, health indicators, and economic growth of nations.¹² The Commission for Macroeconomics and Health has also recently made a strong case for increased global investments and partnerships in research as a means for stimulating economic growth and promotion of health.¹² The most durable and sustainable way to do

this in developing countries is through strengthening academic medicine and the promotion of a culture of essential and relevant national research.

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BMJ Publishing Group to launch an international campaign to promote academic medicine

Please join us

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Academic medicine is in crisis across the world.¹⁻⁴ Medicine's capacity to research, think, and teach is collapsing just at the time when science, social trends, and globalisation are offering great opportunities—and threats. The BMJ Publishing Group wants to help revitalise—and reinvent—academic medicine. How can academic medicine best prepare for the 21st century? We don't have an answer, but we propose a great debate.

We are not even entirely clear on the diagnosis. Why is academic medicine failing? The increasing pressure to provide service is one cause. Faced with healthcare reforms and government retrenchment, clinical research programmes and funding have withered. Lack of financial incentives and increasing disillusionment about the prospects of a career in academic medicine have hampered efforts to recruit and retain faculty. Financial pressure on universities means that the brightest and most imaginative scholars come second to the scientists who bring in large sums from industry. Lack of rewards for good teachers poses a serious threat to future medical education and research.

Collective action is needed, and the BMJ Publishing Group is keen to be a catalyst. Our board has given us

£50 000 to start the process. We want to partner with individuals and organisations to create dialogue and debate about the best strategies to revitalise academic medicine. It seems clear that more of the same will not be enough for academic medicine.¹⁻⁵ It needs to change, and we should probably talk of academic health care not academic medicine. The campaign, international and collaborative in spirit, will, we hope, encourage more resources to flow into academic health care and promote reinvestment in scientific and teaching excellence.

The BMJ Publishing Group is in a good position to spark the campaign. We, like other publishers, depend on what academic medicine produces. Academic health professionals constitute a core readership. It's in our best interest to raise the profile of academic medicine both within the profession and internationally.

But we cannot possibly do this alone. We are busy forming links, but we need a leader, an international advisory board, and help from as many institutions, academics, and other journals as possible. Funding for the campaign may come from a range of private and public

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